

147. A method of claim 145, wherein the virus is administered systemically or at a site other than directly into a tumor of said cancer.
148. A method of claim 145, wherein the virus is administered locally into a tumor of said cancer.
149. A method of claim 145, wherein said amount of virus is at least 4×10^8 PFU/kg.
150. A method of claim 149, wherein said amount of virus is administered locally into a tumor of said cancer.
151. A method of claim 145, wherein said amount of virus is at least 4×10^9 PFU/kg.
152. A method of claim 151, wherein said amount of virus is administered systemically.
153. A method of claim 145, wherein multiple doses of said virus is administered.
154. A method of claim 145, further comprising administering radiation or a chemotherapeutic agent.
155. A method of claim 154, wherein the chemotherapeutic agent has anti-cancer, immune-enhancing, or virus-enhancing activity.
156. A method of claim 145, wherein said virus is substantially free of red blood cell membranes.
157. A method of claim 145, wherein said virus is free of tumor cells or tumor cell components.
158. A method of claim 145, wherein said virus is strain M.
159. A method of claim 145, wherein said virus is genetically-engineered.

160. A method of claim 145, wherein said virus is not 73-T.

161. A method of claim 145, wherein said virus is not 1E10.

162. A method of claim 145, wherein said virus treats cancer without the presence of toxic sequelae.

163. A method of claim 145, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.

164. A method of treating cancer in a mammal having cancer comprising administering systemically to said mammal a Newcastle disease virus in an amount which alone is cytolytic to said cancer and results in regression of a tumor of said cancer.

165. A method of claim 164, wherein said cancer is a solid tumor.

166. A method of claim 164, wherein said mammal is a human.

167. A method of claim 164, wherein said amount of virus is at least 4×10^8 PFU/kg.

168. A method of claim 164, wherein said amount of virus is at least 4×10^9 PFU/kg.

169. A method of claim 164, wherein multiple doses of said virus is administered.

170. A method of claim 164, further comprising administering radiation or a chemotherapeutic agent.

171. A method of claim 164, wherein said virus is substantially free of red blood cell membranes.

172. A method of claim 164, wherein said virus is free of tumor cells or tumor cell

components.

173. A method of claim 164, wherein said virus is strain M.

174. A method of claim 164, wherein said virus is genetically-engineered.

175. A method of claim 164, wherein said virus is not 73-T.

176. A method of claim 164, wherein said virus is not 1E10.

177. A method of claim 164, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.

178. A method of treating cancer in a mammal having cancer comprising administering to said mammal an amount of Newcastle disease virus and radiation or a chemotherapeutic agent, wherein the amount of virus is alone cytolytic to said cancer and results in regression of a tumor of said cancer.

179. A method of claim 178, wherein said cancer is a solid tumor.

180. A method of claim 178, wherein said mammal is a human.
having cancer.

181. A method of claim 180, wherein said amount of virus is at least 4×10^8 PFU/kg.

182. A method of claim 181, wherein said virus is administered locally into a tumor of said cancer.

183. A method of claim 180, wherein said amount of virus is at least 4×10^9 PFU/kg.

184. A method of claim 183, wherein said virus is administered systemically.

185. A method of claim 180, wherein said virus is administered systemically.
186. A method of claim 180, wherein multiple doses of said virus is administered.
187. A method of claim 180, wherein said virus is substantially free of red blood cell membranes.
188. A method of claim 180, wherein said virus is free of tumor cells or tumor cell components.
189. A method of claim 180, wherein said virus is strain M.
190. A method of claim 180, wherein said virus is genetically-engineered.
191. A method of claim 180, wherein said virus is not 73-T.
192. A method of claim 180, wherein said virus is not 1E10.
193. A method of claim 180, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.
194. A method of treating cancer in a mammal having cancer comprising administering to said mammal a Newcastle disease virus in an amount which alone is cytotropic to said cancer and results in regression of a tumor of said cancer, wherein said virus is administered in multiple doses.
195. A method of claim 194, wherein said cancer is a solid tumor.
196. A method of claim 194, wherein said mammal is a human.
197. A method of claim 196, wherein said amount of virus is at least 4×10^8 PFU/kg.

198. A method of claim 197, wherein said virus is administered locally into a tumor of said cancer.

199. A method of claim 196, wherein said amount of virus is at least 4×10^9 PFU/kg.

200. A method of claim 199, wherein said virus is administered systemically.

201. A method of claim 196, wherein said virus is administered systemically.

202. A method of claim 196, further comprising administering radiation or a chemotherapeutic agent.

203. A method of claim 196, wherein ~~said~~ virus is substantially free of red blood cell membranes.

204. A method of claim 196, wherein said virus is free of tumor cells or tumor cell components.

205. A method of claim 196, wherein said virus is strain M.

206. A method of claim 196, wherein said virus is genetically-engineered.

207. A method of claim 196, wherein said virus is not 73-T.

208. A method of claim 196, wherein said virus is not 1E10.

209. A method of claim 196, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.

210. A method of treating cancer in a mammal having cancer comprising administering to said mammal a Newcastle disease virus in an amount which alone is cytotropic to said cancer and results in regression of a tumor of said cancer, wherein said virus is not 73-T.

211. A method of claim 210, wherein said cancer is a solid tumor.

212. A method of claim 210, wherein said mammal is a human.

213. A method of claim 212, wherein said amount of virus is at least 4×10^8 PFU/kg.

214. A method of claim 213, wherein said virus is administered locally into a tumor of said cancer.

215. A method of claim 212, wherein said amount of virus is at least 4×10^9 PFU/kg.

216. A method of claim 215, wherein said virus is administered systemically.

217. A method of claim 212, wherein said virus is administered systemically.

218. A method of claim 212, wherein said virus is administered in multiple doses.

219. A method of claim 212, further comprising administering radiation or a chemotherapeutic agent.

220. A method of claim 212, wherein said virus is substantially free of red blood cell membranes.

221. A method of claim 212, wherein said virus is free of tumor cells or tumor cell components.

222. A method of claim 212, wherein said virus is strain M.

223. A method of claim 212, wherein said virus is genetically-engineered.
224. A method of claim 212, wherein said virus is not 1E10.
225. A method of claim 212, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.
226. A method of treating cancer in a mammal having cancer comprising administering to said mammal locally into a tumor of said cancer a Newcastle disease virus in an amount which alone is cytolytic to said cancer, and administering radiation or a chemotherapeutic agent.
227. A method of claim 226, wherein said cancer is a solid tumor.
228. A method of claim 226, wherein said mammal is a human.
229. A method of claim 228, wherein said amount of virus results in regression of said cancer.
230. A method of claim 229, wherein said amount of virus is at least 4×10^8 PFU/kg.
231. A method of claim 229, wherein said amount of virus is at least 4×10^9 PFU/kg.
232. A method of claim 229, wherein said virus is administered in multiple doses.
233. A method of claim 229, wherein said virus is substantially free of red blood cell membranes.
234. A method of claim 229, wherein said virus is free of tumor cells or tumor cell components.

235. A method of claim 229, wherein said virus is strain M.
236. A method of claim 229, wherein said virus is genetically-engineered.
237. A method of claim 229, wherein said virus is not 73-T.
238. A method of claim 229, wherein said virus is not 1E10.
239. A method of claim 229, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.
240. A method of treating cancer in a mammal having cancer comprising administering to said mammal locally into a tumor of said cancer a Newcastle disease virus in an amount which alone is cytolytic to said cancer, wherein the virus is administered in multiple doses.
241. A method of claim 240, wherein said cancer is a solid tumor.
242. A method of claim 240, wherein said mammal is a human.
243. A method of claim 242, wherein said amount of virus results in regression of said cancer.
244. A method of claim 243, wherein said amount of virus is at least 4×10^8 PFU/kg.
245. A method of claim 243, wherein said amount of virus is at least 4×10^9 PFU/kg.
246. A method of claim 243, further comprising administering radiation or a chemotherapeutic agent.

247. A method of claim 243, wherein said virus is substantially free of red blood cell membranes.

248. A method of claim 243, wherein said virus is free of tumor cells or tumor cell components.

249. A method of claim 243, wherein said virus is strain M.

250. A method of claim 243, wherein said virus is genetically-engineered.

251. A method of claim 243, wherein said virus is not 73-T.

252. A method of claim 243, wherein said virus is not 1E10.

253. A method of claim 243, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.

254. A method of treating cancer in a mammal having cancer comprising administering to said mammal locally into a tumor of said cancer a Newcastle disease virus in an amount which alone is cytolytic to said cancer, wherein the virus is not 73-T.

255. A method of claim 254, wherein said cancer is a solid tumor.

256. A method of claim 254, wherein said mammal is a human.

257. A method of claim 256, wherein said amount of virus results in regression of said cancer.

258. A method of claim 257, wherein said amount of virus is at least 4×10^8 PFU/kg.

259. A method of claim 257, wherein said amount of virus is at least 4×10^9 PFU/kg.

260. A method of claim 257, wherein said virus is administered in multiple doses.
261. A method of claim 257, further comprising administering radiation or a chemotherapeutic agent.
262. A method of claim 257, wherein said virus is substantially free of red blood cell membranes.
263. A method of claim 257, wherein said virus is free of tumor cells or tumor cell components.
264. A method of claim 257, wherein said virus is strain M.
265. A method of claim 257, wherein said virus is genetically-engineered.
266. A method of claim 257, wherein said virus is not 1E10.
267. A method of claim 257, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.
268. A method of treating cancer in a mammal having cancer comprising administering to said mammal at least 4×10^8 PFU/kg of a Newcastle disease virus, which amount is alone is cytolytic to said cancer, and administering radiation or a chemotherapeutic agent.
269. A method of claim 268, wherein said cancer is a solid tumor.
270. A method of claim 268, wherein said mammal is a human.
271. A method of claim 270, wherein said amount of virus results in regression of said cancer.

272. A method of claim 271, wherein said amount of virus is at least 4×10^9 PFU/kg.

273. A method of claim 271, wherein said virus is administered locally.

274. A method of claim 271, wherein said virus is administered systemically.

275. A method of claim 271, wherein said virus is administered in multiple doses.

276. A method of claim 271, wherein said virus is substantially free of red blood cell membranes.

277. A method of claim 271, wherein said virus is free of tumor cells or tumor cell components.

278. A method of claim 271, wherein said virus is strain M.

279. A method of claim 271, wherein said virus is genetically-engineered.

280. A method of claim 271, wherein said virus is not 73-T.

281. A method of claim 271, wherein said virus is not 1E10.

282. A method of claim 271, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.

283. A method of treating cancer in a human having cancer comprising administering systemically to said human at least 4×10^8 PFU/kg of a Newcastle disease virus, which amount is alone is cytolytic to said cancer.

284. A method of claim 283, wherein said amount of virus results in regression of said cancer.

285. A method of claim 284, wherein said amount of virus is at least 4×10^9 PFU/kg.

286. A method of claim 284, wherein said virus is administered in multiple doses.

287. A method of claim 284, further comprising administering radiation or a chemotherapeutic agent.

288. A method of claim 284, wherein said virus is substantially free of red blood cell membranes.

289. A method of claim 284, wherein said virus is free of tumor cells or tumor cell components.

290. A method of claim 284, wherein said virus is strain M.

291. A method of claim 284, wherein said virus is genetically-engineered.

292. A method of claim 284, wherein said virus is not 73-T.

293. A method of claim 284, wherein said virus is not 1E10.

294. A method of claim 284, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.

295. A method of treating cancer in a human having cancer comprising administering to said human at least 4×10^8 PFU/kg of a Newcastle disease virus, which amount is alone is cytolytic to said cancer, wherein the virus is administered in multiple doses.

296. A method of claim 295, wherein said amount of virus results in regression of said cancer.

297. A method of claim 296, wherein said amount of virus is at least 4×10^9 PFU/kg.
298. A method of claim 296, wherein said virus is administered systemically.
299. A method of claim 296, wherein said virus is administered locally.
300. A method of claim 296, further comprising administering a chemotherapeutic or radiotherapeutic agent.
301. A method of claim 296, wherein said virus is substantially free of red blood cell membranes.
302. A method of claim 296, wherein said virus is free of tumor cells or tumor cell components.
303. A method of claim 296, wherein said virus is strain M.
304. A method of claim 296, wherein said virus is genetically-engineered.
305. A method of claim 296, wherein said virus is not 73-T.
306. A method of claim 296, wherein said virus is not 1E10.
307. A method of claim 296, wherein the cancer is a carcinoma, sarcoma, fibrosarcoma, synovial sarcoma, colon carcinoma, breast carcinoma, prostate carcinoma, lung carcinoma, cervical carcinoma, neuroblastoma, glioblastoma, or melanoma.

REMARKS

The pending claims have been canceled and replaced by the foregoing new claims. Applicants apologize for the extensive revisions (and possible inconvenience in this regard to the examiner); however, the new references cited for the first time in the Information Disclosure Statement filed March 18, 1996, required a re-analysis of the complicated